SR 520 Floating Bridge Design – Common Questions

Floating bridge design evolution

How was the design developed?

- Architectural design concepts for the new SR 520 floating bridge are the result of years of consultation with design professionals, our partner agencies and local communities in Seattle and on the Eastside.
- From 2005 to 2006, WSDOT hosted a Citizens Design Advisory Group (DAG) made up of our partner agencies, Eastside and west side community members and organizations. The DAG resulted in the SR 520 Corridor Aesthetics Handbook, "a statement of the vision and expectations that the communities along SR 520 have for the aesthetic character of the new facility." The SR 520 Corridor Aesthetics Handbook is available online in the SR 520 Program Library.
- A key component of the Corridor Aesthetics Handbook is "Corridor Unity."
    - As described in Chapter 1: *"Corridor Unity" is a strategy that acknowledges that SR 520 is an important regional connector and carries high volumes of traffic between Seattle and communities east of Lake Washington. Corridor-wide design principles are therefore concerned with the visual unity and aesthetic integrity of the corridor right of way between Interstates 5 and 405, and reflect the fact that most observers will be traveling at highway speeds. High speeds mean that aesthetic treatments should be large, simple, and not distracting to drivers.*
    - And in Chapter 2: *Corridor unity means that the SR 520 corridor would have a recognizable look and a distinctive character that are created by the interplay among the aesthetic elements of the facility. To achieve this, there must be one big idea that acts as an organizing theme for the design.*
- This handbook was used as a primary reference to develop the 2011 SR 520 Bridge Architectural Design Principles to inform the SR 520 Floating Bridge and Landings Project Request for Proposal.
    - The 2011 SR 520 Bridge Architectural Design Principles document identified both major and minor architectural elements that help promote a deliberate rhythm or user experience for all bridge users.
- WSDOT offered the Seattle Design Commission and the Medina City Council an opportunity to appoint design members to the task force that reviewed

contractor proposals for their architectural features, and helped determine the technical credits awarded to each contractor firm.

- Once the contractor Kiewit/General/Manson, A Joint Venture (KGM) was selected, KGM and WSDOT launched an urban design task force that includes the Seattle Design Commission and Medina representatives and continues today. The task force has continually discussed design proposals from KGM and made design refinements to share with the Seattle Design Commission and the Medina City Council.
- WSDOT and KGM presented to the Seattle Design Commission in October 2011 and January 2012 to gather Commission feedback on draft proposals. The designs were then shared with the Seattle City Council, on the WSDOT Flickr site, and at public open houses in March 2012.
- The current designs of the main components of the floating bridge, including sentinels and belvederes, are specifically required as part of the design-build contract with KGM.
- The height of the new floating bridge was also informed by public input to the I-5 to Medina project final environmental impact statement. In response to public feedback, WSDOT has lowered the profile of the floating bridge from a once-planned height of 30 feet to approximately 20 feet from the water to the road deck on the low-rise area of the floating bridge

Public feedback on the new floating bridge design

Can the public still provide input to the design of the floating bridge?

- There are several elements that are currently being refined, including pedestrian path railing, sentinel lighting, and themes for the interpretive signage at the belvederes.
- We've gathered comments on these items at March 2012 open houses, and we always accept comments through the SR 520 Program inbox at sr520bridge@wsdot.wa.gov. Comments received to date are being reviewed and evaluated and will be included when we present to the Seattle Design Commission, planned for early May 2012.
- WSDOT welcomes public comment for consideration, although much of the major design elements of the floating bridge are already fixed.

Floating bridge design and the Seattle Community Design Process

- In 2009, the Washington State Legislature authorized funding for final design and construction of the new SR 520 floating bridge. After the project was funded, WSDOT moved forward with the design-build procurement process. Part of the procurement process includes furthering the design for inclusion in the contract documents.
- The SR 520 Bridge Architectural Design Principles manual included in the FB&L RFP was developed during 2010 and released in the RFP in Jan. 2011.

This manual was informed by the design efforts noted above and helped to ensure that we could launch construction in 2012 and complete the construction by 2015. We are continuing to refine and finalize the design as we work with the Seattle Design Commission.

- WSDOT is currently leading the Seattle Community Design Process (SCDP), a public engagement process to refine the design features of the remaining unfunded SR 520 project elements from I-5 to the west end of the floating bridge.
- Project staff will consider the architectural elements of the floating bridge as we are refining the elements of the remaining part of the corridor. In addition to design, the SCDP is also exploring multimodal connections, sustainability, and access to local and regional parks.

Bridge features: sentinels, lighting and belvederes

What is the purpose of the sentinels?

- The sentinels at the east and west ends of the floating bridge reflect guidance from the 2006 DAG to mark the gateways from water to land at both sides of the lake.
- The sentinels are intended to help set the context of the bridge as a regional structure and convey a sense of place as people cross the bridge.
- They mark the ends of the floating bridge and act as a visual point of reference as users cross from the water-based floating bridge to the land-based approaches.
- The sentinels also serve a structural function as they house stairwells that will allow maintenance workers access to the entire length of the bridge.

How is WSDOT planning lighting for the sentinels?

- The lighting on the sentinels is still being refined. At the suggestion of the Seattle Design Commission, KGM hired lighting designer Horton Lees Brogden Lighting Design (HLB) to review and refine the plans based on Design Commission feedback.
- HLB is an internationally recognized and award winning architectural lighting firm. They have offices in New York, San Francisco, Los Angeles and Boston, with the project work being led by their San Francisco office staff.
- HLB has an extensive project portfolio, including highly regarded regional and national projects such as the Marion Oliver McCaw Hall Seattle Opera House, Vancouver Convention Center, Anacostia Neighborhood Library, Cooper Union and San Francisco City Hall. HLB's Transportation portfolio includes the Las Vegas monorail Nextel Station, the Los Angeles Metro Rail Hollywood/Highland and Vermont/Santa Monica Stations, and the Ronald Reagan Washington National Airport.

- The lighting system that HLB is designing is adjustable. It can be modified after installation to ensure that it is not a distraction to drivers and neighbors.
- We look forward to future work with HLB as they provide guidance on lighting for the new SR 520 bridge.

Why has WSDOT included belvederes on the new floating bridge?

- The belvederes were also requested in the 2006 DAG process, where constituents on both sides of the Lake wanted to provide a safe place for bicyclists and pedestrians to rest and enjoy the view while crossing Lake Washington – a distance of approximately 2 miles.
- The five belvederes are planned to provide adequate space at regular intervals for visitors on the bridge.
- We are still accepting feedback on interpretive signs that will be included on at the belvederes. Potential themes include:
    - Bridge engineering and construction
    - Bridge fun facts
    - Bridge and lake history
    - History of floating bridges in the region
    - Regional features and "What am I looking at?" illustrations
    - Environmental protection, fish habitat and ecosystems
    - Tribal history in the region
    - Sustainability features
- Please send your feedback to mailto:sr520bridge@wsdot.wa.gov.

What are the individual costs of each design feature? Can certain features be added or replaced?

- We are still refining the railings, lighting, and interpretive signage. The primary features of the floating bridge are fixed.
- The design-build contract is set as a lump sum from the design-build contractor. WSDOT is unable to separate the cost of specific features from the overall cost of the project.